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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------------|
| 10/724,237 | 12/01/2003 | Adrian Forster | FORSTER1 | 9763 |
| 1444 7590 09/07/2007 BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303 | | | EXAMINER STULII, VERA | |
| | | | ART UNIT 1761 | PAPER NUMBER |
| | | | MAIL DATE 09/07/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/724,237 | FORSTER ET AL. | |
| | Examiner | Art Unit | |
| | Vera Stulii | 1761 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/19/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

In light of recent claims amendments, the rejection of claim 1 under 35 USC § 112 second paragraph has been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2 and 8 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhrts (US 2003/0228369) in view of Pilz et al (US 4,263,253).

The references and rejections are incorporated as cited in the previous Office Action.

Response to Arguments

Applicant's arguments filed June 19, 12007 have been fully considered but they are not persuasive.

On page 7 of the Reply to the Office action mailed February 22, 2007, Applicants state that Kuhrts does not disclose high percentage of xanthohumol. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., percentage of xanthohumol) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 8 of the Reply, Applicants state that “one skilled in the art would assume that Kuhrts extracted alpha acids from hops using pressures at about 300 to 500 bar”. This is not being persuasive for the reasons of record. As stated in the previous Office action, “Kuhrts does not teach specific values of extraction parameters such as pressure and temperature” (page 3 of the Office action mailed February 22, 2007). Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On page 8 of the Reply, Applicants state that “the information in Kuhrts regarding the high concentration of alpha-acids (paragraph 0047) and that one of the primary alpha acids would be xanthohumol (paragraph 0045) is not correct. Only humulon is an alpha acid, whereas xanthohumol is a polyphenol”. Examiner respectfully disagrees. Recitation of xanthohumol in different references does not provide its constant or unwavering definition. Different references choose to label xanthohumol differently. In any case, Kuhrts clearly states that extraction of alpha acid and xanthohumol as an alpha-acid [0045].

On page 8 of the Reply, Applicants state that “Pilz adds nothing to Kuhrts”. Examiner respectfully disagrees. As stated in the previous Office Action, Pilz et al teach dissolving a solid in a gas which is under supercritical conditions of temperature and pressure (Col. 2 lines 19-20). Pilz et al teach that the process is carried out under

pressures between 20 and 1200 bar (Col. 2 lines 52-53) and temperature range from 20 to 140°C (Col. 2 lines 48-49). Pilz et al also teach the use of supercritical gases is particularly suitable for solids which required to be very pure (Col. 2 lines 27-28).

Claims 3-7 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhrts (US 2003/0228369) in view of Pilz et al (US 4,263,253), Erdelmeier et al. (US 2005/0042318) and Babish et al. (US 2003/0113393).

The references and rejections are incorporated as cited in the previous Office Action.

Response to Arguments

Applicant's arguments filed June 19, 12007 have been fully considered but they are not persuasive.

On page 9 of the Reply, Applicants state that Kuhrts does not disclose high percentage of xanthohumol. As stated above, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., percentage of xanthohumol) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 10 and 11 of the Reply, Applicants address Erdelmeier et al. and Babish et al. references individually. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references

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individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As stated in the previous office Action, Erdelmeier et al. teach it was well known in the art to carry out several extractions of hop material using supercritical carbon dioxide in order to increase content of prenylated chalcones (xanthohumol). Babish et al. teach it was well known in the art to remove supercritical carbon dioxide from the extract in order to achieve a higher concentration of extract by simply release the pressure to volatize the carbon dioxide.

Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhrts (US 2003/0228369) in view of Pilz et al (US 4,263,253), Ohnogi et al. (US 2004/0002423).

The references and rejections are incorporated as cited in the previous Office Action.

Response to Arguments

Applicant's argument on p.11 of the reply regarding claims 9-13 are not deemed persuasive. In response to applicant's argument that "Ohnogi discloses that it is well known to add ethanol based hop extracts to food and beverages", it is noted that Ohnogi et al tech adding hop extract (particularly xanthohumol extract) to food and beverages for health enhancement ([0001], [0151]). It is noted that ethanol extract disclosed by Ohnogi et al serves as an example of extracts added to foods and

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beverages, and shows that ethanol may be used as an appropriate organic solvent as recited in claim 11.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

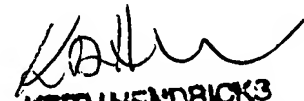
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vera Stulii whose telephone number is (571) 272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VS


KEITH HENDRICKS
PRIMARY EXAMINER